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Chapter 21

Marc Lalonde, the Health Field Concept and Health Promotion

ABSTRACT

During the 20th century, public health evolved with increasing capacity for disease prevention as scientific breakthroughs occurred in microbiology, immunology, nutrition, and other sciences. Disease-control advanced and new epidemiologic evidence identified risk factors for the growing burden of noncommunicable diseases such as the cardiovascular diseases, cancer, and others. Medical care also improved and became more accessible through health insurance systems both in the private and governmental sector. Health systems became more combined public–private endeavors, with health insurance for medical- and hospital-care taking center stage.

Epidemiology blossomed as a science following World War II, producing vital insights and evidence of contributory factors to noncommunicable diseases. In the 1960s the cumulative evidence of smoking as a direct cause of lung cancer and heart disease was identified as a major public health challenge. These relationships became clear and increasingly accepted after the US Surgeon General's Report in 1964.

*In 1974, Hon. Marc Lalonde, Canada's Minister of National Health and Welfare issued the book *A New Perspective on the Health of Canadians*, which identified genetic, environmental, personal lifestyle, and medical care as equally important issues in personal and population health.*

New Perspectives led to the "Ottawa Charter" in 1986 which defined health promotion and has become a vital issue in public health. The health promotion movement immediately found a crucial role in smoking reduction and diet change to deal with the pandemics of lung cancer and heart disease. In the 1980s health promotion found itself at the frontline dealing with the HIV pandemic when there were no biomedical means to stem the pandemic of death from AIDS. Public health had to find new and effective instruments for disease control. A renewed emphasis on social inequalities in health in the 21st century exemplified in the Millennium Development Goals (MDGs) addressed vulnerable populations with linked targets of reducing poverty, promoting education and gender equality, safer environment, and biomedical disease-control measures as global health policy. This more holistic approach to population health has become a leading element in modern public health largely based on the intellectual contribution of Marc Lalonde.



Honorable Marc Lalonde, PC, OC, QC, LLL, MA, Minister of National Health and Welfare, Canada, 1972–77. He was responsible for *A New Perspective on the Health of Canadians* in 1974. Photo provided by Mr LaLonde with personal permission, 2017.

BACKGROUND

Marc Lalonde was born in 1929 at Île Perrot, Quebec, and obtained a Master of Law degree from the Université de Montréal, a master's degree from Oxford University, and a further diploma from the University of Ottawa. He served in 1959 as special advisor to the federal Justice Minister of Canada and then moved to practice law in Montreal returning to Ottawa in 1967 as an advisor in the Prime Minister's Office under Liberal Prime Minister Lester B. Pearson. He remained when Pierre Trudeau became Prime Minister of Canada in 1968, serving as Principal Secretary. Lalonde entered federal politics in 1972, was elected as a Liberal Member of Parliament for Quebec, and joined the Cabinet as Minister of National Health and Welfare. During 1972–77 he served as Minister of National Health and Welfare and in 1974 published a landmark document *A New Perspective on the Health of Canadians* that brought him international renown. This document was the cornerstone for the reconceptualization of public health policy, as it has evolved since its publication.

After serving in various other ministerial positions, Lalonde retired as a Cabinet minister in 1984 and currently practices law in Montreal. In 1989, he was made an Officer of the Order of Canada and in 2004 he was inducted into the Canadian Medical Hall of Fame. In 1988, he received the World Health Organization Medal for “*exceptional contribution to health policy*” and in 2002 he was honored by the Pan American Health Organization (PAHO). As part of its 100th anniversary celebration, Lalonde was named by PAHO as one of 12 “*Public Health Heroes of the Americas, in recognition of their noteworthy contributions to public health in the Region of the Americas.*”

A New Perspective on the Health of Canadians is widely regarded as a ground-breaking document issued by a government recognizing that other strategies beyond biomedical methods are needed to improve the health of

a population. The *New Perspective* document introduced what was called the Health Field Concept that health is a result of four major elements: human biology, health care systems, environment, and lifestyle. In Canada, and many other countries, the focus of health policies in those days was on health insurance for hospital and medical care. Public health was marginal in priority, but awareness was growing from research on smoking and other cardiovascular disease risk factors, such as emerged from research in Britain on smoking, lung cancer, and the many other studies of risk factors for cardiovascular diseases (see Chapter 14). The landmark publication of the US Surgeon General's Report on Smoking in 1964, the Framingham study in Massachusetts, and others indicated that many of the key risk factors for disease were due to lifestyle issues, i.e. personal habits influenced by societal factors including diet, smoking, and exercise as well as access to medical care. *New Perspectives* proved to be a major contribution to public health policy generally providing the basis for the health promotion movement which became a fundamental element of current public health globally.

The traditional approach to health as generally accepted in the 1960–70s focused on advancement in the science and practice of medicine as the major tools for improvements in health. National health insurance enables people to access medical care and hospital care, along with the biomedical instruments of public health such as sanitation and immunization. The level of a population's health was, justifiably, seen as dependent on access to and the quality of medical care. However, as a consequence, health policy was directed toward acute care hospital and physician-centered expenditures. Emphasis in Canada was on provincial Medicare plans of universal coverage hospital and medical insurance plans, and their financing with federal standards and cost sharing. Health promotion and disease prevention were of lower priority in Canada at that time, lacking schools of public health and a federal equivalent of the US Centers for Disease Control, with lack of political, media and public attention and public financing for public health (see Chapters 8 and 15).

Following a period of doubts and debate, Canada adopted the *New Perspectives* approach to become one of the leading countries in health promotion. The public dialogue that had been previously been dominated by concerns about universal health insurance, the costs and delivery of health care services, began to direct attention to other health issues, especially those relating to personal behaviors such as smoking, diet and physical activity as well as inequalities in universal health systems.

The World Health Organization (WHO) sponsored the famous 1978 Alma Ata Conference articulating a policy of "Health for All" with a focus on primary health care. The Alma Ata Declaration promoted global recognition of health needs and national orientation that health depends on more than medical care.

The First International Conference on Health Promotion, organized by WHO and held in Ottawa, Canada, in November 1986 largely stimulated by the Health Field Concept, produced a formal definition of health promotion which was to become a conceptual stimulus to development of a new discipline and major factor in public health policy. The Ottawa Charter adopted the basic Lalonde concepts, defining health promotion as: *“the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being.”*

The Lalonde concept linked medical care, genetics, environment, and self-care, including the biomedical Germ, the environmental Miasma and the political Social Medicine theories of the 19th century. This promoted innovations in national and global health leading to major health achievements in all countries in the late 20th century and early 21st century. The concepts of New Perspectives were articulated operationally by global consensus in the Millennium Development Goals (MDGs, 2000–15), and the follow-up Sustainable Development Goals (SDGs, 2016–30). Both had specific health targets (reduced child and maternal mortality and addressing HIV, tuberculosis and other global disease issues), but in the context of poverty reduction, improved nutrition, education and environmental conditions, rights of women and social and economic advances.

In 1979 the United States issued health promotion guidelines with stated health targets. “Healthy People” was a landmark in the history of US public health, characterized as a document *“to encourage a second public health revolution.”* It reflected an emerging consensus among the health community that the nation’s health strategy should emphasize the prevention of disease. This document has been periodically updated since then through a broad consultative process providing guidelines for preventive approaches to clinicians as well as public health organizations including state and local authorities. US national policy articulated health objectives for the nation with specific targets related to preventable conditions, and has sustained this approach with renewal of targets each decade since.

Concurrently, findings of research in epidemiology, health policy, and health economics, made it convincingly clear that investment in the promotion of health and prevention is cost-effective and more beneficial to improving quality of life than solely focusing health expenditures on medical care. It became increasingly accepted that the state has responsibility for the health of its citizens, and to allocate resources to carry out that responsibility. But Health Promotion also emphasizes the responsibility of the individual and the community, as well as medical care providers, to prevent adverse health conditions and events. The concept and challenge of individual behavior

measures as an important part of the health field requires training, legislative, policy and fiscal support as a domain where health policy can act successfully to promote health and prevent avoidable disease.

New Perspectives demonstrated the limitations of predominant reliance on medical and hospital care for addressing the main causes of morbidity and mortality. The wider view of health, frankly addressed the importance of self-imposed and socio-economic and environmental risks as major factors in population health. The data clearly showed the main causes for morbidity and mortality related to preventable conditions. Considering that the Canadian health system was already one of the most advanced and accessible health systems at the time, Lalonde called for a wider holistic view of health with a focus on moderating self-imposed health risks, improving the environment and considering human genetics, as well as classical health care systems. In an acceptance speech to the PAHO meeting in 2002 on the 28th anniversary of the publication of *New Perspectives* awarding him the honor “Public Health Hero of the Americas,” Lalonde put the issue this way:

“It is important to reassert the fundamental validity of the Health Field Concept and the interrelationship between its four components: human biology, environment, lifestyle, and health care organization. Although conceived in the context of an economically advanced country, the strength and the appeal of the Health Field Concept are its universal application. The specific plans of action would obviously need to reflect local conditions, but the general strategies are capable of application in developing as well as developed countries. New Perspective cannot be dismissed as a document of interest only to rich countries. If we really want to improve the health of our citizens, we cannot concentrate only on the health care organization.”

The Health Field Concept (HFC) brought a new emphasis to health thinking which had previously primarily focused on medical and hospital care with insurance to cover payment for those services as a national responsibility. The HFC articulated what was recognizable as a more holistic approach including the role of genetics, self-care, lifestyle habits and the environment, as well as medical care. The timing was important: it came a decade after the famous 1964 US Surgeon General’s Report on Smoking which had a strong effect on public and legislator opinion with a growing public call for public law to control promotion and advertising of cigarette consumption, placing the powerful cigarette industry in a defensive mode which continued to deny the health threat.

The immediate Canadian response to *New Perspectives* was mixed, including apathy, charges of “blaming the victim,” excuses for reducing federal financial support for costs of provincial health insurance plans, and various conspiracy theories. The “Lalonde doctrine” was criticized as deficient in unequivocal scientific evidence which would justify taking action against potentially harmful factors. The main challenge came from the health sector

complaining of unsatisfactory evidence in certain issues. But at the same time, a growing flood of epidemiologic evidence identified risk factors and successful methods of intervention to prevent disease or consequences of disease such as smoking reduction, control of hypertension, poor diet, lack of exercise and others (see Chapter 14). *New Perspectives* was also criticized as overemphasizing lifestyle with little attention to environment including poverty, education, housing and other social inequalities. Moreover, health in Canada is a provincial responsibility, while the federal level had no clear public health structures to implement the recommendations of the report. Lessons learned later in Canada from the 2003 severe acute respiratory syndrome (SARS) epidemic led to development of the federal Public Health Agency of Canada, created in 2004 to develop capacity to anticipate and respond effectively to public health threats and to promote disease prevention. Similarly, in the same time period many regional laboratories and schools of public health sprang up across the country with a new public health orientation.

New Perspectives was received positively outside of Canada and to this day is recognized in Europe especially, as a game-changer for health policy, generating similar reports in Britain, Finland, Sweden, and the United States. The report remains a landmark contribution to the transformation in thinking about health that has occurred with the emergence of the health promotion movement.

Following publication of *New Perspectives*, Canada has continued taking an important international role in the discussion of health determinants as exemplified in the first International Conference on Health Promotion in Ottawa, Canada in 1986 and the Ottawa Charter. The Ottawa Charter defines prerequisites for health as the fundamental conditions and resources resulting from the social and physical environments. The means of action toward health promotion, as defined in the Charter, includes the creation of supportive environments and development of personal skills, hence enabling people to exercise more control over their own health context as well as make their personal and family lifestyle choices more conducive to health. This also requires reorientation of health services toward prevention and health promotion.

The Ottawa Charter called for a new direction for public health, with a pledge to health promotion:

- *“to move into the arena of healthy public policy, and to advocate a clear political commitment to health and equity in all sectors.*
- *to counteract the pressures toward harmful products, resource depletion, unhealthy living conditions and environments, and unhealthy nutrition; and to focus attention on public health issues such as pollution, occupational hazards, housing, and settlements.*
- *to respond to the health gap within and between societies, and to tackle the inequities in health produced by the rules and practices of these societies.*

- *to acknowledge people as the main health resource; to support and enable them to keep themselves, their families and friends healthy through financial and other means, and to accept the community as the essential voice in matters of its health, living conditions, and well-being.*
- *to reorient health services and their resources toward the promotion of health and primary prevention; and to share power with other sectors, other disciplines and, most importantly, with people themselves.*
- *to recognize health and its maintenance as a major social investment and challenge; and to address the overall ecological issue of our ways of living” (Ottawa Charter for Health Promotion, 1986).*

During the 1980s, new disease challenges were appearing with no biomedical means of care let alone cure. HIV/AIDS was the classic case, but this was followed by hepatitis C and other conditions for which care was essentially palliative. In the early years of the AIDS pandemic, preventive care depended on health promotion initiatives to change unsafe sexual behavior and illicit drug practices to reduce transmission and stem the spread of the pandemic, with education, condom and needle distribution. This was the case while millions died of HIV/AIDS until the late 1990s when effective biomedical measures became available using powerful new classes of antiretroviral life saving drugs for treatment and prevention of transmission. Health promotion measures were the only real option in the form of partnership with the most vulnerable gay community in dealing with the growing pandemic of HIV and illicit drug use. Even in the second decade of the 21st century, health promotion is vital in AIDS control to promote preventive treatment for HIV-positive pregnant women and to reduce backsliding on safe sex practices among treated AIDS patients to reduce reappearance of other sexually transmitted diseases thought to have been controlled.

CURRENT RELEVANCE

The Health Field Concept marked an important leap forward from the traditional perception of health focused and funded mostly in terms of medical and hospital care toward a more inclusive approach. However, the *New Perspectives* definition of four health fields, by its very nature and as acknowledged in the report, is also limiting. The health field terminology has evolved to incorporating the term “holistic” health.

In order to give the proper attention required to health issues, a broad perspective is needed for recognition by national and international policy makers as reflected in policies and resource allocation. Planning for health has had many definitions incorporating the fundamentals of *New Perspectives*. The US Department of Health and Human Services, *Healthy People 2020* defines determinants of health as the social environment,

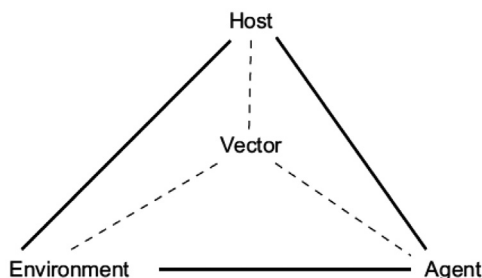


FIGURE 21.1 The host-agent-environment paradigm. Source: Tulchinsky TH, Varavikova EA. *The new public health*. 3rd edition. San Diego, CA: Academic Press/Elsevier, 2014, p. 49.

physical environment, genetic endowment, health care, and individual biological and behavioral factors. It distinguishes outcomes of disease, well-being, and prosperity and suggests a causal pathway linking determinants and outcomes. The Health in All Policies for state and local health departments in the United States focuses on:

- Promotion of health, equity, and sustainability;
- Support for intersectoral collaboration;
- Benefits from multiple partners;
- Engagement of stakeholders; and
- Creation of structural or procedural change, institutionalizing change in existing or new structures.

The classical epidemiologic triangle of host-agent-environment causation of disease based on the Germ Theory has proven to be dramatically successful in approaching and in many cases diminishing or even eradicating important infectious diseases such as smallpox, poliomyelitis, measles, and rubella. It has drastically reduced others such as HIV, malaria, and tuberculosis and even neglected tropical diseases (NTDs) such as onchocerciasis (river blindness), dracunculiasis (guinea worm disease), leprosy, and others. Since the period following World War II, evidence of new methods of interventions to reduce the heavy burden of cardiovascular disease and cancer by lifestyle and nutritional measures, and improved medical care, have shown remarkable success in reducing stroke, coronary heart disease mortality, and mortality from cancer of the lung, cervix, liver, stomach, and colon-rectum. The classical Germ Theory is represented in the epidemiologic triangle in [Figure 21.1](#). [Figure 21.2](#) represents the transition of single causation of disease to a multifactorial paradigm including genetics, personal life habits, and a broad range of other societal factors including socio-economic and physical environmental conditions. This might be seen as a transition from a purely biomedical model to a “renewed miasma theory,” including sanitation, and an entire range of new health policy and Social Medicine as pioneered in the

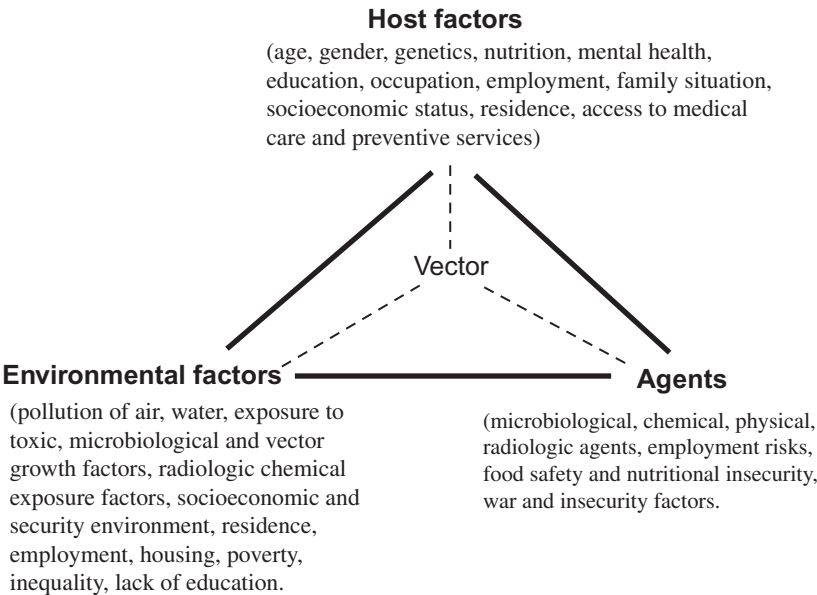


FIGURE 21.2 The expanded host-agent-environment holistic paradigm. Source: *Tulchinsky TH, Varavikova EA. The new public health. 3rd edition. San Diego, CA: Academic Press/Elsevier, 2014, p. 49.*

19th century by Rudolph Virchow in Germany. Finding common ground in a much broader holistic range of risk factors for the host-agent-environment paradigm has emerged with this transition stimulated by the Health Field Concept supported by great progress in evidence from epidemiology, medical sciences, and public health experience of success. The two figures represent the epidemiologic transition, which is often focused on evolution of predominance of infectious diseases to overwhelming dominance of non-infectious diseases over the past century.

Health in All Policies are being adopted and implemented in many jurisdictions in Europe and in the United States. The California-based Public Health Institute, as an example, conducts an extensive program of advocacy, research and consultation in developing climate control measures, healthy urban environments and many other aspects of healthy public policy. It has influenced state policies on many issues including vehicle emission standards, urban planning and others. The US Preventive Services Task Force (USPSTF) created in 1984 is an independent, volunteer panel of national experts in prevention- and evidence-based medicine. The Preventive Services Task Force works with wide consultative approaches to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screening, counseling, and preventive medications, such as low dose aspirin, statins, and antihypertensive medications to people with

risk factors for cardiovascular diseases, and vaccinations for pneumonia and influenza for the chronically ill, the elderly, pregnant women and many others. All recommendations are published online and/or in peer-reviewed journals. Similar organizations have been created in Britain, Sweden, and other countries to continuously update guidelines for preventive services with best available evidence. The United Kingdom NICE (National Institute for Health and Care Excellence) for clinical and policy guideline in the National Health Service, is followed by other countries as well.

ETHICAL ISSUES

Another downstream effect from *New Perspectives* is a return to the issue of inequalities in health including in countries with highly developed health insurance for national health services. Sir Michael Marmot, Research Professor of Epidemiology and Public Health, University College, London, famously led a research group on health inequalities for some 30 years. The Whitehall studies of British civil servants showed a striking inverse social gradient in morbidity and mortality providing evidence for the importance of reducing social inequalities in health. Marmot, who was knighted in 2000 for his outstanding epidemiological leadership, was the Chair of the Commission on Social Determinants of Health set up by the World Health Organization in 2005. This document's theme returned to earlier versions of Social Medicine seeing health as a political issue as promoted by Rudolph Virchow (1821–1902) a preeminent German medical scientist of the mid-19th century and pioneer developer of cellular pathology.

Virchow, who opposed the Germ Theory, Darwin's theory of evolution and the hand washing practices of Semmelweis, was a strong advocate of the idea that if living conditions could be improved, there would be fewer epidemics. Epidemics, he said, were best treated politically rather than medically and fostered the concept of Social Medicine that improving people's living conditions, hygiene, and diet would be highly beneficial to their general health and well-being. He considered health as a universal human aspiration and a basic human need. Marmot and The Commission on Social Determinants of Health renewed focus on the "causes of the causes" of health inequality as socially determined conditions in which people grow, live, work, and grow old. Ethical and economic issues together influenced the international consensus on the Millennium Development Goals and the Sustainable Development Goals.

Health promotion became a transformational element of public health generating strong advocacy and growing signs of success in anti-tobacco campaigns, and in addressing cancer and cardiovascular diseases with anti-smoking education and associated legal limitations on advertising, tobacco sales to minor children, smoking in public places and an higher cost of cigarettes by taxation, along with dietary change, exercise and biomedical care.

Health promotion became the only feasible public health activity when the HIV/AIDS epidemic storm arrived in the 1980s when there were no effective biomedical measures available. Health promotion provided some useful measures such as education, condom and syringe distribution, in high-risk groups to reduce the spread of the disease, until effective antiretroviral drugs came available in the late 1990s.

There is also a growing use of expanded data sets in health to show regional and individual health care process and outcome measures of morbidity and mortality. This provides a growing base for quality control and financial incentives for improvement as well as sanctions for poorer performance and outcome measures. Regional, social class status, and ethnic disparities in health have increasingly come to light even where universal access systems have been in place for many years such as in the United Kingdom, but also in the costliest health system in the world in the United States. These inequalities have important social, political and ethical implications for health policy.

ECONOMIC ISSUES

The World Bank since 1993 has promoted the economic value of improving equity in health in developing countries. The European Union has articulated a similar position for high-income countries that health investment improves economic growth (Suhrke and McKee 2006). This concept influenced the global consensus on the Millennium Development Goals and the follow-up Sustainable Development Goals. The burden of illness and its cost are high whether the payment is private, or by health insurance through place of work, or by governmental insurance or service systems (see Chapters 8 and 15). Many diseases once thought to be treatable but not preventable are now avoidable by self care, community action or by medical care whether immunizations or treatment of hypertension. The economic gains of preventing disease or the complications of disease are enormous. Investment in prevention thus gains economic rationale. This applies in countries at all economic levels. A payment system that covers medical care but excludes preventive services or public health promotion is behaving irrationally from an economic viewpoint. Thus health insurance systems adopt new methods of screening for cervical or colo-rectal cancer as part of their benefit system.

The World Health Organization (WHO) actively promotes Health in All Policies to address inequalities and society-based issues causing ill health including nutrition and food fortification. This includes many activities of State and local authorities, such as reducing air pollution, using sustainable clean fuels, home use of fuels, compact and efficient urban planning, construction standards for safe housing, low emission public transport, recreation and shopping facilities in urban neighborhoods. It also includes general

sanitation, safe water and waste management including reduction in plastics use, and recycling/reuse. These activities require political leadership of state and local authorities with incentives to reduce poverty, unemployment, drug abuse, and pollution, and to improve urban planning, transportation, access to quality foods and other efforts to reduce inequality in health. Education and support systems to help people make healthy lifestyle choices are the crucial elements of modern public health.

The UN sponsored Millennium Development Goals (MDGs) developed by consensus of almost all nations in large part as a derivative of the *New Perspective's* holistic approach to health improvement globally in the context of social and environmental changes. Three of the eight goals established by consensus of 190 countries are specifically on health topics: reducing child mortality; reducing maternal mortality; and, combating HIV/AIDS, malaria, and other diseases. The other goals are reducing poverty; achieving universal primary education; reducing gender inequality and empowerment of women; ensure environmental sustainability; and, development of a global development partnership. The MDG achievements between 2000 and 2015 were remarkable, particularly in reducing poverty, child mortality, maternal mortality, increasing education accessibility especially for girls, access to safe water, management of HIV, malaria, tuberculosis, and others. This was achieved by the consensus of nations on the issues and building public–private cooperation between nations and donors, international aid and recognition that education, the social and physical environments, and public health are the crucial issues. The initiative was followed by Sustainable Development Goals (SDGs, 2015–30) which are even broader in scope, but recognizing that health is part of, and dependent on, many factors including access to medical care, again widely credited internationally in large part due the intellectual legacy of Marc Lalonde and the Health Field Concept of the *New Perspective*. The economic rationale for investment in prevention of chronic diseases is that there is proven track record of reducing cardiovascular and cancer deaths by relatively inexpensive intervention including those of health promotion, such as smoking and alcohol reduction, and those of biomedical intervention, such as low-dose aspirin, blood pressure control, immunizations, and nutritional fortification of basic foods. Cost utility studies for individual preventive interventions have become a necessary analysis for policy determination of priorities. WHO estimated in 2005 that an additional 2% reduction in chronic disease death rates worldwide, per year, over the next 10 years would prevent 36 million premature deaths by 2015, stating that the scientific knowledge to achieve this goal already exists (WHO, 2005). Global burden of disease studies indicate that behavioral, environmental and occupational, and metabolic risks can explain half of the global mortality providing many opportunities for prevention (Global Burden of Disease, 2015).

CONCLUSION

The Health Field Concept in the *New Perspective* in 1974 opened a new paradigm of public health thinking and policy that health is a benefit and resultant of a broad range of causes and responses to address those causes. The Health Field Concept was an articulation based on decades of research and controversy, with continuing expanding of biomedical capacity of medical care and vaccines, and with research defining risk factors for the major disease groups. Together these strongly influenced a true renaissance of public health, or what has been called The New Public Health.

The Health Field Concept articulated in *A New Perspective on the Health of Canadians* (1974) was one of the most influential health policy documents of the 20th century. It was a working paper addressing the concepts of health and the basic principles as a basis for health policy, but it indicated and led to a wider approach to public health policy. It marked a change in the way to perceive and promote a holistic approach to health, moving from a predominantly biomedical focus in the mid-twentieth century toward a wider view, including the examination of determinants in each of four health fields: human biology, lifestyle, health care organization, and the environment.

Lalonde's *New Perspective* challenged traditional views of health urging new health policies and priorities. It placed the individual as a key factor in his/her own health status, applying to the community level as well. It emphasized advocacy or health promotion and the development of prevention-oriented national health strategies involving personal and community health behavior including many aspects of the community physical and social environment. In modern terms, it is a 21st century balanced cohesion between the Germ and the Miasma theories or more broadly the biomedical and the sanitation and social hygiene movements of the 19th century.

The Health Field Concept was a major contributor to development of a new paradigm for public health. In this new articulation of health promotion, health protection, disease prevention including universal access to medical care, and long-term community care, are all of importance for population and individual health. There was also attention to the concept of vulnerable populations, based not only on individual behavioral, but also societal factors. This has implications for resource allocation and recognition of demographic and epidemiologic changes as well as important additions to public health capabilities with new vaccines to prevent infectious diseases and cancers, for example. The once-dominant position of hospitals and medical care in health spending has changed, with increased emphasis on community care, prevention and health promotion.

The global impact of a holistic concept of health was important in formulation of global health policy in the Millennium Development Goals and their achievements up to 2015, for the follow-up Sustainable Development

Goals for the years 2015–30, and new initiatives to reduce inequalities in health. The impact of New Perspectives also contributed to the movement led by Sir Michael Marmot to focus on reducing national and global inequalities in health. Lalonde's contribution to this process was of great significance to national and global health progress in stimulating a renaissance of the public health community and indeed population health, that is a work still in process.

Even the purest biomedical aspect of public health has implications for health promotion including different aspects, including legal, ethical, economic and public education, whether a topic is environmental impact on health, nutrition, prevention of cancer and cardiovascular diseases, vaccination policies or legal requirements for public health as is pasteurization of milk, or mandatory use of car seats for children. The principle issues outlined in the Health Field Concept and the 1986 Ottawa Charter on health promotion are essential to carry public health forward in the 21st century. This requires continuing advocacy of translation of public health policies into programs essential for protecting and improving population health for high-, medium- and low-income countries.

RECOMMENDATIONS

1. National and international leaders of government and organizations should apply the broadened Health Field Concept for adaptation and implementation for low, middle and high income countries especially for vulnerable population groups.
2. Decision makers and policy analysts should stress the elements of health promotion as defined in the Ottawa Charter including:
 - Building public health policy, including biomedical, epidemiological, ethical, legal and economic aspects;
 - Creating supportive environments by promoting public awareness and political support;
 - Strengthen community actions by working with local, regional, state and national authorities as well as voluntary organizations, and the private sector for promoting health on the public agenda;
 - Developing personal responsibility, skills and commitment to explain and advocate policies for promoting a health agenda;
3. Reorient health service priorities with continuous evaluation by studying quantitative and qualitative values of disease prevention and health promotion.
4. The fundamentals of the Health Field Concept should be incorporated in all basic training in public health and in ongoing in-service training, so that future managers and workers in all sectors of public health incorporate this orientation in planning and providing for current and future public health challenges.

5. Funding to academic institutions for implementing training programs, and transitional funding to health authorities to adapt these principles into re-orientation of health systems should be provided by national, state/provincial/regional and local government authorities.
6. Case studies of issues dealt with in public health primarily by health promotion approaches should be incorporated in study programs including continuing education.
7. Professional journals should be encouraged to require authors of scientific papers relevant to population health submitted for publication to include observations of potential translational aspects of the work in discussions of findings addressing the actual or potential relevance of the work to population health.

STUDENT REVIEW QUESTIONS

1. How does the gap between a biomedical model and health promotion aspects of the new public health reflect the 19th century conflict between the Germ, Miasma and Social Medicine theories?
2. How has each contributed to advancing population health over the past century and relevance in coming decades?
3. How was defining human behavior as a key factor in individual and population health a step forward in public health policy?
4. Give examples of important disease groups where individual behavior is a major contributory or causative factor.
5. How does health promotion fit with traditional topics of public health to create a “New Public Health”?
6. How does health promotion fit with climate change initiatives?
7. How does health promotion fit with traditional biomedical aspects of public health such as immunization and nutritional issues of micronutrient deficiencies?
8. What intervention principles are needed to mitigate health inequalities/disparities in countries with advanced universal healthcare systems with interventions based on population-health approaches?

RECOMMENDED READINGS

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